

SPECIFICATION AMENDMENTS

Please amend the title appearing before paragraph 0001 on page 1 of the specification as follows:

PROCESS FOR CONTROLLING A ~~LOCKING~~ CLOSING DEVICE IN A MOTOR VEHICLE

Please amend paragraphs 0002, 0006-0008, 0010, 0017, 0018, 0020, 0021, and 0031 as follows.

[0002] This invention concerns a process for controlling a closing or locking device in a motor vehicle, in particular for controlling a motor vehicle sunroof. When ~~locking~~ closing the ~~locking~~ closing device by means of power control, it is important to prevent an object or a body part of a vehicle passenger from becoming crushed by the closing motion of a ~~locking~~ closing means of the ~~locking~~ closing device. For this purpose, a crush protection function is provided in power-controlled ~~locking~~ closing devices.

[0006] The force required for closing a ~~locking~~ closing means of a ~~locking~~ closing device, such as a window pane of a power window or a sliding cover of a sunroof, is heavily dependent upon the wind load forces exerted on the ~~locking~~ closing means. The wind load forces in turn are heavily dependent upon the wind speed,

and particularly the travel wind speed during the driving operation of a vehicle, and hence are dependent upon the travel speed of the vehicle.

[0007] Moreover, the shape of the vehicle and the shape of objects attached to the vehicle significantly influence the wind load forces exerted on the vehicle and on the ~~locking~~ closing means of a ~~locking~~ closing device. Examples of objects that are attached to the vehicle include a ski box attached to the roof, a roof container, a bicycle rack, or a trailer.

[0008] In a process according to the invention for controlling a ~~locking~~ closing device in a motor vehicle, a closing resistance value is detected for protection against the crushing of a body part during the closing motion of a ~~locking~~ closing means of a ~~locking~~ closing device. The closing resistance value is characteristic of a force acting against the closing motion of the ~~locking~~ closing means. Should it be determined, through the use of the closing resistance value and an additional auxiliary variable indicative of the wind load forces occurring at a certain speed, that a crush situation exists, a protective measure is initiated. In particular, the closing operation is delayed, interrupted or reversed.

[0010] In one embodiment of the process, the auxiliary variable is a variable indicative of a change in the wind load forces exerted on the ~~locking~~ closing means, whereby the change is affected by a modification to the vehicle. What is detected, for example, is whether or in which way a modification to the vehicle or to a vehicle attachment that affects the wind load forces has occurred; this

information is then stored as the auxiliary variable. Examples of such modifications to the vehicle are the extension or retraction of retractable headlights, the extension or retraction of a retractable spoiler, the extension, retraction or tilting of a draft stop, the attachment or removal of a removable spoiler or paneling or the adjustment, attachment or removal of another component which affects wind forces. A variable indicating such a modification can be used directly as the auxiliary variable or can be used to determine an auxiliary variable.

[0017] One variable affecting the wind load forces, and hence the closing resistance of the ~~locking~~ closing means, is the location of an attachment on or above the vehicle. For example, whether a roof container is attached 20 centimeters more to the front or 20 centimeters more to the rear can have a significant effect on the wind load forces acting on the vehicle, and particularly on the ~~locking~~ closing means. Likewise, the wind load forces can be modified as a function of whether a ski box is attached to the left or right of the vehicle. Therefore, in another embodiment of the invention, the location at which an attachment is arranged on or above the vehicle is detected. The detected fastening location is used to determine the auxiliary variable.

[0018] Apart from the wind load forces or an indicative variable thereof, variables affecting the closing force required for closing the sliding cover, such as e.g. the outside temperature, the vehicle interior temperature, the vehicle age or the duration since the last actuation of the ~~locking~~ closing device, can be used as

additional auxiliary variables, in order to determine whether a crush situation exists. Alternatively, these variables can also be used to determine the auxiliary variable.

[0020] ~~The sole figure~~ Figure 1 depicts a flow chart of a process for controlling a sunroof in a motor vehicle, and

Figure 2 schematically illustrates a closing device such as a sunroof which may be controlled by a process according to the invention.

[0021] In step 1, a closing resistance value is detected. The closing resistance value can be, for example, the motor current of the electric driving motor of the closing device, such as the sunroof 10 schematically shown in Figure 2.

[0031] The process according to the invention for controlling a ~~locking~~ closing device is particularly suited for ~~locking~~ closing devices such as sunroofs, tilt sunroofs, lamellar sunroofs or power windows. However, any other closing devices of the vehicle, which can be controlled during the travel of the vehicle and whose closing resistance can be influenced by wind load forces, can be controlled by means of the process according to the invention.